VERSION WITH MARKINGS TO SHOW CHANGES MADE

The claims have been amended as follows:

41. (Three Times Amended) A method of increasing ~~light olefin~~ ethylene yield during conversion of oxygenates to olefins comprising:

(a) contacting a feed including an oxygenate in a primary reactor with a small ~~or medium~~ pore non-zeolitic molecular sieve catalyst under first conditions effective to produce a first product including ~~light olefins~~ ethylene and a heavy hydrocarbon fraction including heavy hydrocarbons;

(b) separating ~~said light olefins~~ the ethylene from ~~said~~ the heavy hydrocarbon fraction;

(c) feeding at least a portion of said heavy hydrocarbon fraction to ~~a second reactor selected from the group consisting of~~ said primary reactor ~~and a separate reactor~~; and

(d) subjecting said portion of said heavy hydrocarbon fraction in said ~~second~~ primary reactor to second conditions effective to convert at least a portion of said heavy hydrocarbons to ~~light olefins~~ ethylene.

Claim 42 has been canceled without prejudice or disclaimer.

43. (Twice Amended) The method of claim 41 wherein said ~~second~~ primary reactor contains zeolite molecular sieve catalyst.

Claims 44, 46, 48, 49, 50 and 52 have been canceled without prejudice or disclaimer.

55. (Twice Amended) A method for increasing ~~light olefin~~ ethylene yield during conversion of oxygenates to olefins comprising:

(a) contacting a feed including an oxygenate in a primary reactor with a small ~~or medium~~ pore non-zeolitic molecular sieve catalyst under conditions effective to produce a product including ~~light olefins~~ ethylene;

(b) separating said product into ~~said light olefins and~~ a product fraction containing the ethylene and a heavy hydrocarbon fraction including heavy hydrocarbons; and

(c) recycling at least a portion of said heavy hydrocarbon fraction to said primary reactor.

New claims 62-86 have been added, as follows:

62. (NEW) The method of claim 41, wherein the second conditions are the same as the first conditions.

63. (NEW) The method of claim 41, wherein the primary reactor has a WHSV of at least about 0.01 hr^{-1}.

64. (NEW) The method of claim 63, wherein the WHSV is from about 0.01 hr^{-1} to about 5000 hr^{-1}.

65. (NEW) The method of claim 63, wherein the WHSV is at least about 1.0 hr^{-1}.

66. (NEW) The method of claim 65, wherein the WHSV is from about 1.0 to about 2000 hr^{-1}.

67. (NEW) The method of claim 63, wherein the WHSV is at least about 20 hr^{-1}.

68. (NEW) The method of claim 67, wherein the WHSV is from about 20 hr^{-1} to about 1000 hr^{-1}.

69. (NEW) The method of claim 55, wherein the primary reactor has a WHSV of at least about 0.01 hr^{-1}.

70. (NEW) The method of claim 69, wherein the WHSV is from about 0.01 hr^{-1} to about 5000 hr^{-1}.

71. (NEW) The method of claim 69, wherein the WHSV is at least about 1.0 hr^{-1}.

72. (NEW) The method of claim 71, wherein the WHSV is from about 1.0 to about 2000 hr^{-1}.

73. (NEW) The method of claim 69, wherein the WHSV is at least about 20 hr^{-1}.

74. (NEW) The method of claim 73, wherein the WHSV is from about 20 hr^{-1} to about 1000 hr^{-1}.

75. (NEW) The method of claim 41, wherein the first conditions include a temperature of from about 200°C to about 700°C.

76. (NEW) The method of claim 75, wherein the temperature is from about 250°C to about 600°C.

77. (NEW) The method of claim 76, wherein the temperature is from about 300°C to about 500°C.

78. (NEW) The method of claim 55, wherein the conditions include a temperature of from about 200°C to about 700°C.

79. (NEW) The method of claim 78, wherein the temperature is from about 250°C to about 600°C.

80. (NEW) The method of claim 79, wherein the temperature is from about 300°C to about 500°C.

81. (NEW) The method of claim 41, wherein the feed has an oxygenate partial pressure of from about 0.1 kPa to about 100 MPa.

82. (NEW) The method of claim 81, wherein the oxygenate partial pressure is from about 6.9 kPa to about 34 MPa.

83. (NEW) The method of claim 82, wherein the oxygenate partial pressure is from about 48 kPa to about 0.3 MPa.

84. (NEW) The method of claim 55, wherein the feed has an oxygenate partial pressure of from about 0.1 kPa to about 100 MPa.

85. (NEW) The method of claim 84, wherein the oxygenate partial pressure is from about 6.9 kPa to about 34 MPa.

86. (NEW) The method of claim 85, wherein the oxygenate partial pressure is from about 48 kPa to about 0.3 MPa.